

ABSTRACT

Methods and kits for amplifying nucleic acids are provided. Double stranded cDNA with uridine residues incorporated into one strand is synthesized and the uridine containing strand is nicked at uridine residues. The DNA is extended from the nicks in the presence of dUTP using a strand displacing enzyme. Repeated cycles of nicking and extension result in amplification of the nucleic acid. Methods are also provided for analysis of the above sample by hybridization to an array, which may be specifically designed to interrogate the collection of target sequences for particular characteristics, such as, for example, the presence or absence of one or more polymorphisms or the presence or absence of a transcript.